

Sample Respiratory Protection Program

This Sample Respiratory Protection Program is for a hypothetical company that has chosen to interpret certain provisions of 29 CFR 1910.134 in ways that could be different from the way another company might choose to implement it.

The following checklist is provided to assist the employer in determining if their respiratory protection program contains all the required elements. The checklist itself is not included in the written program.

A written respiratory program that is specific to your workplace and covers the following:

- Procedures for selecting respirators.
- Medical evaluations for employees required to wear respirators.
- Fit testing procedures.
- Routine use procedures and emergency respirator use procedures.
- Procedures for ensuring adequate air quality for supplied air respirators.
- Training in respiratory hazards.
- Training in proper use and maintenance of respirators.
- Program evaluation procedures.
- Procedures for ensuring that workers who voluntarily wear respirators (excluding filtering face-pieces) comply with the medical evaluation, and cleaning, storing and maintenance requirements of the standard.

Designate a program administrator who is qualified to administer the program.

Update the written program as necessary to account for changes in the workplace affecting respirator use.

Provide equipment, training, and medical evaluation at no cost to employees.

(COMPANY NAME) RESPIRATORY PROTECTION PROGRAM

TABLE OF CONTENTS

1.0 Purpose

2.0 Scope

3.0 Responsibilities

Program Administrator

Supervisors

Employees

4.0 Program Elements

Selection Procedures

IDLH

Cartridge/Canister Change Schedule For Vapors and Gases

Particulate Protection

Updating the Hazard Assessment

Voluntary Respirator Use

Medical Evaluation

Fit Testing

Respirator Use

Procedures for IDLH

Procedures for Interior Structural Fire Fighting

Cleaning & Disinfecting

Storage

When To Inspect

What To Inspect

Emergency Respirators

Defective Respirators

Breathing Air Quality and Use

Training and Information

5.0 Program Evaluation

6.0 Recordkeeping

1.0 Purpose

(Company Name) has determined that employees in the (state area) are exposed to respiratory hazards during routine operations. These hazards include (state hazard e.g. wood dust, particulate, and vapors), and in some cases represent Immediately Dangerous to Life or Health (IDLH) conditions. The purpose of this program is to ensure that all (company name) employees are protected from exposure to these respiratory hazards.

Engineering controls, such as ventilation and substitution of less toxic materials, are the first line of defense at (Company Name); however, engineering controls have not always been feasible for some of our operations, or have not always completely controlled the identified hazards. In these situations, respirators and other protective equipment must be used. Respirators are also needed to protect employees' health during emergencies. The work processes requiring respirator use at (Company Name) are outlined in Table 1 in the Program Elements section.

In addition, some employees have expressed a desire to wear respirators during certain operations that do not require respiratory protection. As a general policy (Company Name) will review each of these requests on a case-by-case basis. As outlined in the Scope section of this program, voluntary respirator use is subject to certain requirements of this program.

2.0 Scope

This program applies to all employees who are required to wear respirators during normal work operations, and during some non-routine or emergency operations such as a spill of a hazardous substance. This includes employees in the (state area). All employees working in these areas and engaged in certain processes or tasks (as outlined in the table below) must be enrolled in the company's respiratory protection program.

In addition, this program applies to any employee who voluntarily wears a respirator when a respirator is not required.

Employees participating in the respiratory program do so at no cost to them. The expense associated with training, medical evaluations and respiratory protection equipment will be borne by the company.

3.0 Responsibilities

Program Administrator

The Program Administrator is responsible for administering the respiratory protection program. Duties of the program administrator include:

- Identifying work areas, processes or tasks that require workers to wear respirators, and evaluating hazards.
- Selection of respiratory protection options.
- Monitoring respirator use to ensure that respirators are used in accordance with their certifications.
- Arranging for and/or conducting training.
- Ensuring proper storage and maintenance of respiratory protection equipment.
- Conducting qualitative fit testing with Bitrex.
- Administering the medical surveillance program.
- Maintaining records required by the program
- Evaluating the program.
- Updating written program, as needed.

The Program Administrator for (company name) is _____ .

Supervisors

Supervisors are responsible for ensuring that the respiratory protection program is implemented in their particular areas. In addition to being knowledgeable about the program requirements for their own protection, supervisors must also ensure that the program is understood and followed by the employees under their charge. Duties of the supervisor include:

- Ensuring that employees under their supervision (including new hires) have received appropriate training, fit testing, and annual medical evaluation.
- Ensuring the availability of appropriate respirators and accessories.
- Being aware of tasks requiring the use of respiratory protection.
- Enforcing the proper use of respiratory protection when necessary.
- Ensuring that respirators are properly cleaned, maintained, and stored according to the respiratory protection plan.
- Ensuring that respirators fit well and do not cause discomfort.
- Continually monitoring work areas and operations to identify respiratory hazards.
- Coordinating with the Program Administrator on how to address respiratory hazards or other concerns regarding the program.

Employees

Each employee has the responsibility to wear his or her respirator when and where required and in the manner in which they were trained. Employees must also:

- Care for and maintain their respirators as instructed, and store them in a clean sanitary location.
- Inform their supervisor if the respirator no longer fits well, and request a new one that fits properly.
- Inform their supervisor or the Program Administrator of any respiratory hazards that they feel are not adequately addressed in the workplace and of any other concerns that they have regarding the program.

•

4.0 Program Elements

Selection Procedures

The Program Administrator will select respirators to be used on site, based on the hazards to which workers are exposed and in accordance with all OSHA standards. All respirators must be certified by the National Institute for Occupational Safety and Health (NIOSH) and shall be used in accordance with the terms of that certification. Also, all filters, cartridges, and canisters must be labeled with the appropriate NIOSH approval label. The label must not be removed or defaced while it is in use.

The Program Administrator will conduct a hazard evaluation for each operation, process, or work area where airborne contaminants may be present in routine operations or during an emergency. The hazard evaluation will include:

- Identification and development of a list of hazardous substances used in the workplace, by department, or work process.
- Review of work processes to determine where potential exposures to these hazardous substances may occur. This review shall be conducted by surveying the workplace, reviewing process records, and talking with employees and supervisors.
- Respiratory hazard will be identified and evaluated through reasonable estimates using methods such as monitoring.

VOLUNTARY AND REQUIRED RESPIRATOR USE AT (COMPANY NAME)	
--	--

Respirator	Department/Process	Hazard
Respirator type and cartridge type	State where the respirator is used	State the hazards
EXAMPLE Half face, organic filter	_____ area	Paint vapors
EXAMPLE SCBA	_____ area	Emergency evacuation
EXAMPLE Dust Filtering face piece	_____ area	Wood dust

A Sufficient number of respirator models and sizes must be available to ensure correct fit.

Immediately Dangerous to Life and Health (IDLH)

The Program Administrator has identified the following area as presenting the potential for IDLH conditions: (state area(s)). The following respirators will be supplied for the employees use in Immediately Dangerous to Life and Health (IDLH): (example, atmosphere supplying respirator)

Cartridge/Canister Change Schedule for Vapors and Gases

(Company Name) will provide an atmosphere supplying respirator or an air purifying respirator with and end-of-service-life indicator (ESLI). If no ESLI the company will implement a change schedule as follows: (Data and information relied upon to establish the schedule must be included in the respirator program, for example manufacture recommendations and objective information).

Particulate Protection

(Company Name) will provide an atmosphere supplying respirator or an air purifying respirator with a NIOSH certified filter.

Updating the Hazard Assessment

The Program Administrator must revise and update the hazard assessment as needed (i.e., any time work process changes may potentially affect exposure). If an employee feels that respiratory protection is needed during a particular activity, he/she is to contact his or her supervisor or the Program Administrator. The Program Administrator will evaluate the potential hazard, arranging for outside assistance as necessary. The Program Administrator will then communicate the results of that assessment back to the employees. If it is determined that respiratory protection is necessary, all other elements of this program will be in effect for those tasks and this program will be updated accordingly.

Voluntary Respirator Use

(Company name) will provide respirators at no charge to employees for voluntary use for the following work processes:

- Employees may wear half-facepiece APRs with organic vapor cartridges while working in the dip coat area.
- Warehouse workers may wear filtering facepieces.

- Spray Booth Operators may wear half-facepiece APRs with organic vapor cartridges while cleaning spray guns.
- Maintenance personnel may wear half-facepiece APRs with P100 cartridges while cleaning spray booth walls, and organic vapor cartridges while loading spray guns.

The Program Administrator will provide all employees who voluntarily choose to wear either of the above respirators with a copy of Appendix D of the standard. (Appendix D details the requirements for voluntary use of respirators by employees). Employees choosing to wear a half-facepiece APR must comply with the procedures for Medical Evaluation, Respirator Use, and Cleaning, Maintenance and Storage.

The Program Administrator shall authorize voluntary use of respiratory protective equipment as requested by all other workers on a case-by-case basis, depending on specific workplace conditions and the results of the medical evaluations.

Medical Evaluation

Employers must provide a medical evaluation to determine each employee's fitness to wear a respirator. The evaluation must be provided before the initial fit-testing and before the respirator is used for the first time. Medical evaluations consist of the administration of a medical questionnaire, which is found in the mandatory Appendix C of the standard, or provision of a physical examination that elicits the same information as the questionnaire for the employee. An employer, who opts to provide physical examinations to his or her employees, need not also administer the medical questionnaire. These evaluations are required for **all** respirator users except for employees who voluntarily use dust masks and for those whose only respirator would be the use of escape-only respirators. Employees who refuse to be medically evaluated cannot be assigned to work in areas where they are required to wear a respirator.

A licensed physician at (state clinic), will provide the medical evaluations. Medical evaluation procedures are as follows:

- Identify physician or other licensed health care professional (PLHCP)
- To the extent feasible, the company will assist employees who are unable to read the questionnaire (by providing help in reading the questionnaire). When this is not possible, the employee will be sent directly to the physician for medical evaluation.
- The medical questionnaire and examinations will be given confidentially during the employee's normal working hours or at a time and place convenient to the employee. The medical questionnaire will be administered in a manner that ensures that the employee understands its content.
- Follow-up medical exams will be granted to employees as required by the standard, and/or as deemed necessary by the (Clinic name) medical clinic physician.
- All employees will be granted the opportunity to speak with the physician about their medical evaluation, if they so request.
- The Program Administrator has provided the (Clinic name) clinic physician with a copy of this program, a copy of the Respiratory Protection Standard, the list of hazardous substances by work area, and for each employee requiring evaluation: his or her work area or job title, proposed respirator type and weight, length of time required to wear respirator, expected physical work load (light, moderate, or heavy), potential temperature and humidity extremes, and any additional protective clothing required.

- Written recommendation regarding the employees ability to use the respirator shall provide only the following information:
 - Limitations on respirator use including whether or not employee is medically able to use the respirator.
 - Need for follow up evaluation.
 - A statement that the PLHCP has provided the employee a copy of the written recommendations.
- Any employee required for medical reasons to wear a positive pressure air purifying respirator will be provided with a powered air purifying respirator.
- After an employee has received clearance and begun to wear his or her respirator, additional medical evaluations will be provided under the following circumstances:
- Employee reports signs and/or symptoms related to their ability to use a respirator, such as shortness of breath, dizziness, chest pains, or wheezing.
- The (Clinic name) clinic physician or supervisor informs the Program Administrator that the employee needs to be reevaluated;
- Information from this program, including observations made during fit testing and program evaluation, indicates a need for reevaluation;
- A change occurs in workplace conditions that may result in an increased physiological burden on the employee.
- All examinations and questionnaires are to remain confidential between the employee and the physician.

Fit Testing

Employees who are required to wear a positive or negative tight fitting respirators must be fit tested with the same make, model, style, and size of respirator that will be used.

Employees are required to be fit tested:

- Prior to being allowed to wear any respirator with a tight fitting facepiece.
 - Annually.
 - When there are changes in the employee's physical condition that could affect respiratory fit (e.g., obvious change in body weight, facial scarring, dental changes etc.).
- Employees must pass an appropriate qualitative or quantitative fit test as stated in 29 CFR 1910.134(f).

Fit tests will be qualitative fit test (QLFT) or quantitative fit test (QNFT) and will be administered according to Appendix A of 29 CFR 1910.134.

The type of fit test administered will be determined by the type of respirator worn and the fit factor that is required to be achieved.

ACCEPTABLE FIT-TESTING METHODS		
	QLFT	QNFT
Filtering facepiece	Yes	No
Half-Face, Negative Pressure, APR (<100 fit factor)	Yes	Yes
Full-Face, Negative Pressure, APR (<100 fit factor) used in atmospheres up to 10 times the PEL	Yes	Yes

Full-Face, Negative Pressure, APR (>100 fit factor)	No	Yes
PAPR	Yes	Yes
Supplied-Air Respirators (SAR), or SCBA used in Negative Pressure (Demand Mode) (>100 fit factor)	No	Yes
Supplied-Air Respirators (SAR), or SCBA used in Positive Pressure (Pressure Demand Mode)	Yes	Yes
SCBA - Structural Fire Fighting, Positive Pressure	Yes	Yes
SCBA/SAR - IDLH, Positive Pressure	Yes	Yes
Mouthbit Respirators	Fit-testing Not Required	
Loose-fitting Respirators (e.g., hoods, helmets)		

The Program Administrator will provide an employee with an opportunity to select a different respirator and to be retested if the employee determines the fit of the respirator is unacceptable.

Respirator Use

Respiratory protection is required for the following:

- Employees are not permitted to wear tight-fitting respirators if they have any condition, such as facial scars, facial hair, or missing dentures, that prevents them from achieving good seal. Employees are not permitted to wear headphones, jewelry, or other articles that may interfere with the facepiece-to-face seal. If an employee wears corrective glasses or goggles it must not interfere with the facepiece to face seal.
- All employees shall conduct user seal checks each time that they wear their respirator. Employees must use a positive and negative pressure check specified in Appendix B-1 of the Respiratory Protection Standard or respirator manufactures recommended user seal check method.
- The effectiveness of respirators will be reevaluated whenever there is a change in work area conditions or degree of employee exposure.

All employees must leave the work area for the following reasons:

- To wash their face and respirator to prevent eye or skin irritation
- If they detect vapor or gas breakthrough, changed in breathing resistance, or leakage of the facepiece.
- To replace the respirator or the filter cartridge or canister.

NOTE: The respirator must be replace if the employee detects vapor or gas breakthrough, changes in breathing resistance or leakage of the facepiece.

All employees shall be permitted to leave the work area to go to the locker room to maintain their respirator for the following reasons: to clean their respirator if the respirator is impeding their ability to work, change filters or cartridges, replace parts, or to inspect respirator if it stops functioning as intended. Employees should notify their supervisor before leaving the area. Employees will use their respirators under conditions specified by this program, and in accordance with the training they receive on the use of each particular model. In addition, the

respirator shall not be used in a manner for which it is not certified by NIOSH or by its manufacturer.

Procedures for Immediately Dangerous to Life and Health (IDLH) Atmosphere

These areas are identified as potential IDLH atmospheres if an employee has to enter and IDLH atmosphere then the following procedures must be followed:

One employee or, when needed more than one employee need to be located outside the IDLH atmosphere.

Maintain constant visual, voice or signal line communication between employee in the IDLH atmosphere and employee outside the IDLH atmosphere (standby person).

The standby person will be trained and equipped to provide effective emergency rescue.

Standby person must notify employer before entering IDLH atmosphere to provide emergency rescue.

Standby person will be equipped with the following:

- Pressure demand or other positive pressure SCBAs, or a pressure demand or other positive pressure supplied-air respirator with auxiliary SCBA; and either
- Appropriate retrieval equipment for removing the employee(s) who enter(s) these hazardous atmospheres where retrieval equipment would contribute to the rescue of the employee(s) and would not increase the overall risk resulting from entry; or
- Equivalent means for rescue where retrieval equipment is not required because of increase of overall risk resulting from entry into or rescue from the IDLH environment.

Procedures for Interior Structural Fire Fighting (fires beyond incipient stage)

Employees must use the following:

- All procedures for IDLH atmosphere.
- At least two employees enter the IDLH atmosphere and remain in visual or voice contact with one another at all times;
- At least two employees are located outside the IDLH atmosphere; and
- All employees engaged in interior structural firefighting use SCBAs.

Cleaning & Disinfecting

(Company Name) will provide a clean sanitary respirator in good working order for employee use.

Respirators are to be regularly cleaned and disinfected using procedures in Appendix B2 of 29 CFR 1910.134 or respirator manufacturer's procedure if at least as effective as Appendix B2.

The following respirator cleaning and disinfecting schedule will be followed:

- As often as necessary to be maintained in a sanitary condition
- Before being worn by different individuals
- After emergency use,, fit testing, and training

Storage

Respirators will be stored as follows:

- In (location) to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and they shall be packed or stored to prevent deformation of the facepiece and exhalation valve.
- In addition to above emergency respirators will be accessible to work area, clearly marked as containing emergency respirator, and stored in accordance with any applicable manufacture instructions.

When To Inspect

All respirators used in routine situations before each use and during cleaning.

Emergency respirators will be inspected as least monthly and in accordance with the manufacturer's recommendations, and shall be checked for proper function before and after each use.

Emergency escape-only respirators shall be inspected before being carried into the workplace for use.

Self contained breathing apparatus (SCBA) will be inspected monthly.

What To Inspect

Tightness of connections

Condition of the various parts including but not limited to:

- Facepiece:
 - cracks, tears, or holes facemask distortion cracked or loose lenses/faceshield
- Headstraps:
 - breaks or tears broken buckles
- Valves:
 - residue or dirt cracks or tears in valve material
- Connecting Tube
 - Kinks, tears, holes, brittle
- Cartridges/canisters:
 - approval designation gaskets cracks or dents in housing proper cartridge for hazard
- Elastic parts
 - Pliability, signs of deterioration

Air and oxygen cylinders will be maintained in a fully charged state and recharged when pressure falls to 90% of manufactures recommended pressure level. Check proper function of regulator and warning device.

Employees are permitted to leave their work area to perform limited maintenance on their respirator in a designated area that is free of respiratory hazards. Situations when this is

permitted include to wash their face and respirator facepiece to prevent any eye or skin irritation, to replace the filter, cartridge or canister, and if they detect vapor or gas breakthrough or leakage in the facepiece or if they detect any other damage to the respirator or its components.

Emergency Respirators

Emergency respirators will be certified by documenting:

- Date of inspection
- Name or signature of inspector
- Findings
- Corrective action
- Means of identification such as a serial number

Defective Respirators

Defective respirators will be removed from service and will be discarded or repaired according to the following procedure:

- Appropriate training personnel will repair or adjust respirator using only approved NIOSH approved parts designed for that respirator.
- According to manufactures recommendations and specifications for type and extent of repairs to be performed
- Reducing and admission valves, regulators, and alarms will be adjusted or repaired only by the manufacturer or a technician trained by the manufacturer.

Breathing Air Quality and Use

Employees using atmosphere supplying respirators (supplied air and SCBA) will be provided with high purity breathing gases

- Compressed breathing air will meet at least the required of Grade D air to include:
- Oxygen content (v/v) of 19.5-23.5%
- Hydrocarbon (condensed) content of 5 milligrams per cubic meter of air or less;
- Carbon monoxide (CO) content of 10 ppm or less
- Carbon dioxide content of 1,000 ppm or less
- Lack of noticeable odor
- Cylinders used to supply breathing air to respirators will meet the following:
- Cylinders must be constructed, tested and maintained in accordance with the shipping container specification regulations of the Department of Transportation (DOT) 49 CFR Parts 173 and 178
- Cylinder must have a certification of analysis from the supplier for Grade D breathing air.

Compressors used to supply breathing will be constructed and situated so as to:

- Prevent contaminants from entering supplied air system

- Have in-line air purifying sorbent beds and filters which will be maintained, replaced, or refurbished following the manufactures instructions.
- A tag containing the most recent change date and signature of person authorized to perform the change will be maintained at the compressor.

Non-oil lubricated compressors will not exceed 10 ppm carbon monoxide in the breathing air.

Oil-lubricated compressors, will use a high-temperature or carbon monoxide alarm, or both, to monitor carbon monoxide levels. If only high-temperature alarms are used, the air supply shall be monitored at intervals sufficient to prevent carbon monoxide in the breathing air from exceeding 10 ppm.

Breathing air couplings will be incompatible with outlets for non-reparable worksite air or other gas system.

Breathing gas containers will be marked in accordance with the NIOSH respirator certification standard 42 CFR Part 84

Training and Information

Comprehensive and understandable training will be provided to employees prior to respirator use and of least annually as follows:

- Basic information in Appendix D of 29 CFR 1910.134 for voluntary respirator use in written or oral format.
- Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator
- What the limitations and capabilities of the respirator are
- How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions
- How to inspect, put on and remove, use, and check the seals of the respirator
- What the procedures are for maintenance and storage of the respirator
- How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators
- The general requirements of this section
- The existence, location, and availability of any records covered by this section
- The person responsible for maintaining and providing access to records
- Each employee's rights of access to these records

Retraining will be administered when there are changes in the workplace, inadequacies in the employee's knowledge, and any other situation to ensure safe respirator use.

5.0 Program Evaluation

The Program Administrator will conduct periodic evaluations of the workplace to ensure that the provisions of this program are being implemented. The evaluations will include regular

consultations with employees who use respirators and their supervisors, site inspections, air monitoring and a review of records.

Factors to be assessed include but not limited to:

- Respirator fit (including the ability to use the respirator without interfering with effective workplace performance)
- Appropriate respirator selection for the hazards to which the employee is exposed
- Proper respirator use under the workplace conditions the employee encounters
- Proper respirator maintenance

Any problems identified during this assessment will be corrected and noted in an inspection log.

6.0 Recordkeeping

Written information regarding medical evaluations, fit testing, and the respirator program will be maintained in (location)

Medical evaluation must be retained for at least the duration of employment plus 30 years.

Qualitative and quantitative fit test records will include the following:

- The name or identification of the employee tested
- Type of fit test performed
- Specific make, model, style, and size of respirator tested
- Date of test
- The pass/fail results for QLFTs or the fit factor and strip chart recording or other recording of the test results for QNFTs
- Fit testing records will be retained until the next fit test is administered.